



## Who is Gemalto?

The world leader in digital security

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Revenue 2008

**€ 1.68 billion**

**1 Billion +**

**SIM cards** delivered in 2008

**400**

**Mobile Telecom  
Operators**

All the world's largest operators



**180**

**OTA platforms**

The largest installed base of OTA

**gemalto**<sup>\*</sup>  
security to be free



# First, quick reminder about the SIM



The **SIM** (Subscriber Identity Module) is an operator-owned smart card with a CPU and memory.

It is used to:

- ✦ Ensure a secure **authentication on operator network**
- ✦ Store **user personal data** (phonebook)
- ✦ Manage **operator personalization data** (SMSC parameters, roaming rules...)
- ✦ Run the **operators' SIM-based applications** (banking, phonebook synchronization...)

It can be remotely administrated via **OTA**

It's the only physical device totally **owned by the operator** in end-users' hands



## Gemalto has reinvented the SIM....

...removing current barriers in terms of...

**MEMORY**

From kB to GB

*Speed*

x60



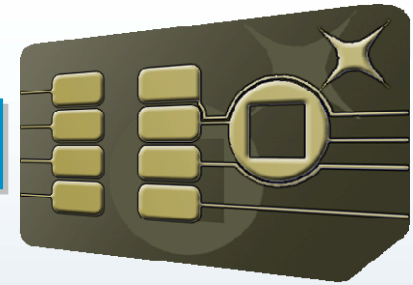
**USER EXPERIENCE**

From text to rich media



# Experiencing the next-generation SIM

## The Multimedia SIM



# Smart Card Web Server

A complementary approach to develop and deploy operators' mobile applications



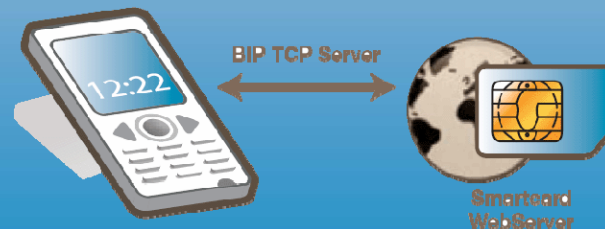
# The Smart Card Web Server (SCWS)

Multimedia SIM's disruptive technology



The **Smart Card Web Server\*** is a **server application** that resides **in the SIM** and responds to requests from the **handset's browser**

The Multimedia SIM with a **Smart Card Web Server** communicates with the handset using a **standardized protocol**



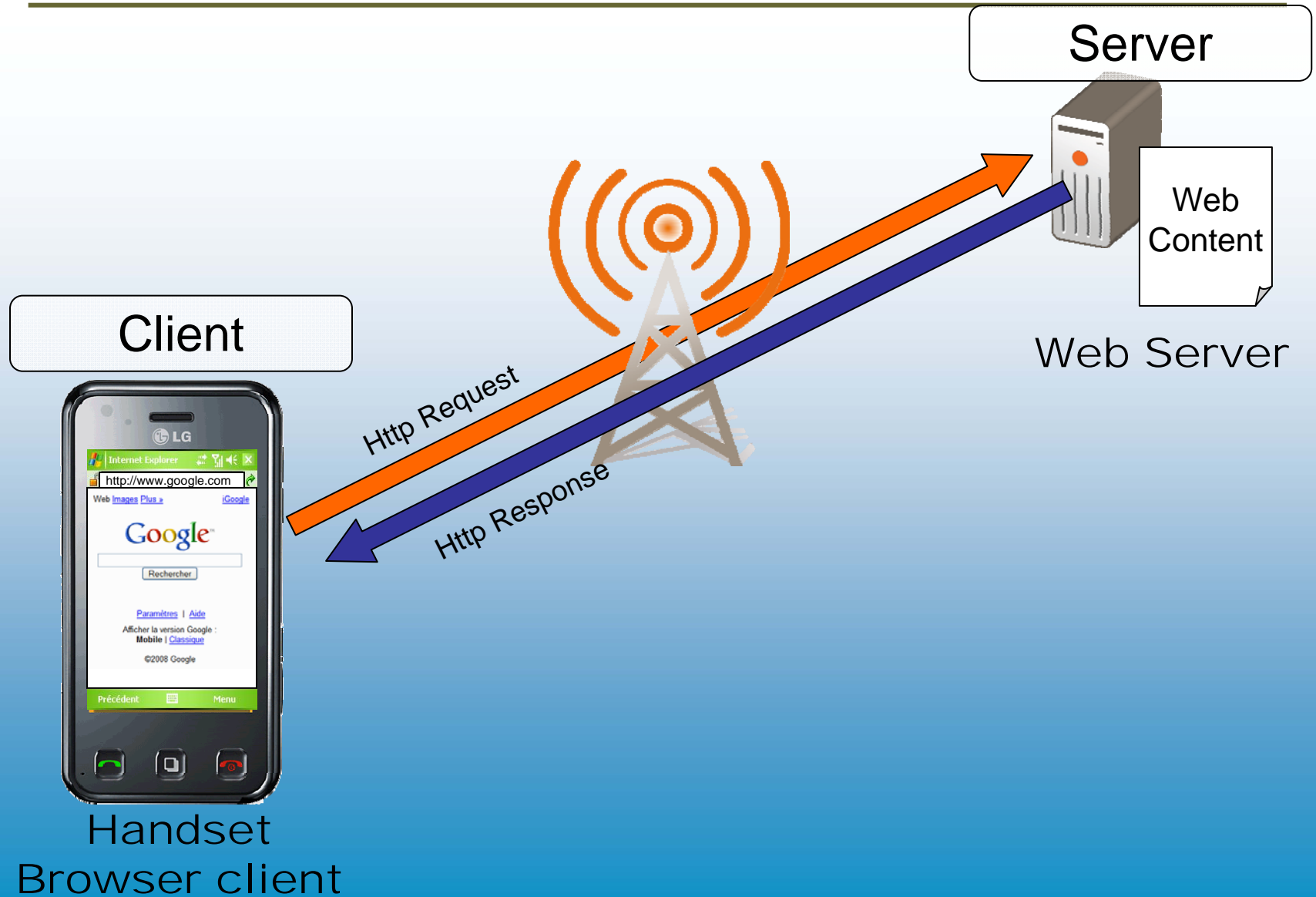
- > Standardised bearer for APDU interface
- > Access to SCWS defined in OMA SCWS
- > <http://127.0.0.1:3516/index.html>

\*It is specified by the Open Mobile Alliance



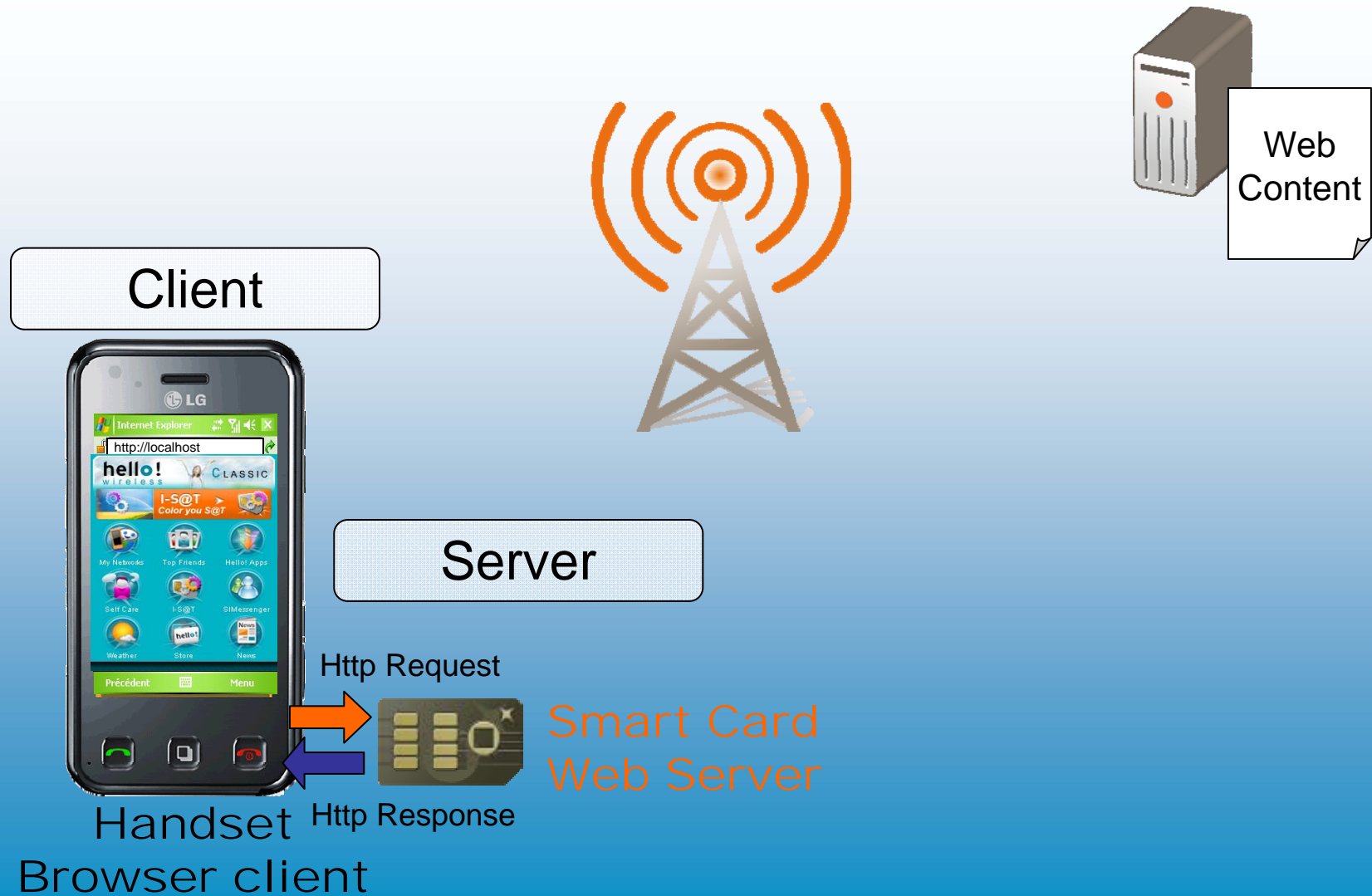
# Quick reminder

## How does a traditional web server work?





# How does the Smart Card Web Server work?





# How does Remote Management work?

**Adapt**

**Monitor**

**Update**

**Segment**





# SCWS benefits for operators and apps providers

## Universal

**No need to port the different platforms and handsets for each application,** the SCWS uses the handset browser, standardized communication channels and device APIs

## Easy to deploy

**No need to pre-load applications onto the handset,** the application is deployed on the SIM, fully under operator's control

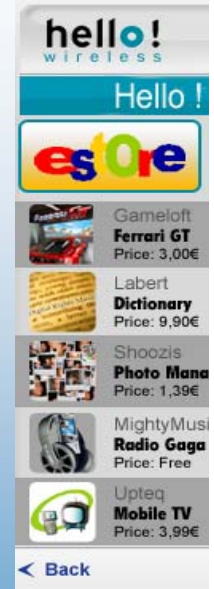
## Portable and personalized

SCWS applications and end-user personalization can be easily **ported from one handset to another**

## Remotely manageable

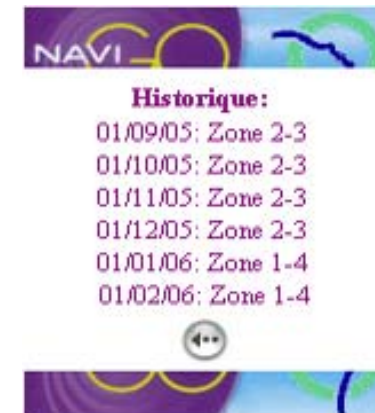
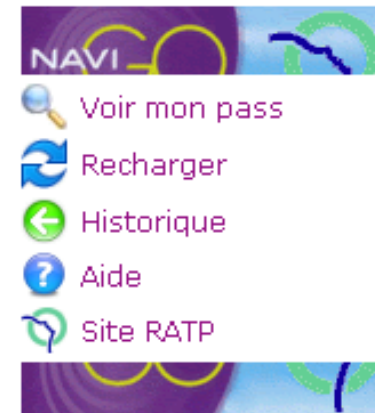
SCWS applications can be **remotely managed** by the operator and this process is invisible to the end-user

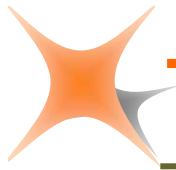
# SCWS applications



Multimedia SIM and SCWS applications

# SCWS as NFC wallet





## The momentum is growing around SCWS...

### “SIM Alliance” initiative gathering all SIM manufacturers:



- Demo kits & White paper available on all SIM manufacturers booths

### GSMA “SmartSIM” initiative:



- Starting at Mobile World Congress '09
- Founding members of the group: SKT, France Telecom Orange, Telenor, Softbank Mobile, Telefonica O2, AT&T, Vodafone TIM



# Thank you for your attention!

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